**Application No.:** 10/726,080

Office Action Dated: December 16, 2008

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1-7 (Canceled)

8. (Currently Amended) A database system for storing data comprising including Extensible Markup Language (XML) instances, said database system comprising:

a processor; and

a computer readable storage medium having program code that causes said processor to perform a plurality of operations, said operations comprising:

generating a container for a plurality of XML schema namespace universal resource identifiers (URIs), each namespace URI uniquely identifying a collection of element type and attribute names, each namespace URI [[and]] identifying a location of a schema document corresponding to and defining the uniquely identified collection, each namespace URI [[and]] thereby specifying a schema for any of a plurality of XML instances conforming to said schema document, each XML instance comprising having a set of XML data conforming to the schema specified by a namespace URI;

placing in the container at least two XML schema namespace universal resource identifiers (URIs);

validating an XML instance according to a schema document identified by at least one of said namespace URIs;

storing a validated XML instance in a database column; and

typing said database column with said container so as to <u>associate the column</u> with the container and thereby require that the XML instance stored in the column and any other XML instance stored in the column conforms to the schema of [[one]] <u>any of the at least two</u> of the XML schema <u>namespaces</u> <u>namespace URIs</u> in the container, wherein said typing <del>comprises</del> <u>includes</u> validating any XML instances existing in said database column prior to said typing.

9. (Canceled)

**Application No.:** 10/726,080

Office Action Dated: December 16, 2008

10. (Previously Presented) The database system of claim 8, said computer readable storage medium further comprising program code executable by said processor that comprises an import function which modifies said container so that it refers to at least one schema component in an XML schema namespace other than XML schema namespaces identified by said at least two XML schema namespace URIs.

- 11. (Previously Presented) The database system of claim 8, said computer readable storage medium further comprising program code executable by said processor that comprises an include function which assembles URIs identified in a plurality of schema location attributes.
- 12. (Previously Presented) The database system of claim 8, said computer readable storage medium further comprising program code executable by said processor that comprises an alter function which adds schema components to XML schema namespaces within said container.

## 13-19. (Canceled)

20. (Currently Amended) A <u>processor-implemented</u> method of validating Extensible Markup Language (XML) instances to be stored in a column of a relational database, said method comprising:

creating, via the processor, a container for a plurality of XML schema namespaces, each XML schema namespace uniquely identifying a collection of element type and attribute names, each namespace URI [[and]] identifying a location of a schema document corresponding to and defining the uniquely identified collection, each namespace URI [[and]] thereby specifying a schema for any of a plurality of XML instances conforming to said schema document, each XML instance comprising having a set of XML data conforming to the schema specified by an XML schema namespace;

placing in the <u>created</u> container at least two XML schema namespaces;

typing a column of a relational database with said container so as to <u>associate the column</u> with the container and thereby require that any XML instance stored in the column conforms to

**Application No.:** 10/726,080

Office Action Dated: December 16, 2008

the schema of [[one]] <u>any of the at least two</u> of the XML schema <u>namespaces</u> <u>namespace URIs</u> in the container, wherein said typing <u>comprises</u> <u>includes</u> ensuring that any XML instances existing in said column prior to said typing conform to at least one schema document identified by a namespace in said container;

ensuring, prior to storing [[an]] a particular XML instance in said column, that the particular XML instance conforms to the schema of one of said XML schema namespaces in the container; and

storing said particular XML instance in said column upon so ensuring.

- 21. (Previously Presented) The method of claim 20, further comprising modifying said container so that the container refers to schema components in other XML schema namespaces.
- 22. (Previously Presented) The method of claim 20, further comprising assembling respective namespaces for a plurality of schema location attributes.
- 23. (Previously Presented) The method of claim 20, further comprising adding schema components to XML schema namespaces within said container for XML schema namespaces.
- 24. (Original) The method of claim 20, further comprising locating a schema that is referred to by an XML schema namespace in the container for XML schema namespaces.
- 25. (Currently Amended) A computer readable storage medium comprising computer readable modules having computer executable instructions for interfacing with a storage location for storing XML instances in a computing system, the modules comprising:

computer readable instructions for collecting a plurality of XML schema namespaces in a container for XML schema namespaces, each XML schema namespace uniquely identifying a collection of element type and attribute names, each namespace URI [[and]] identifying a location of a schema document corresponding to and defining the uniquely identified collection, each namespace URI [[and]] thereby specifying a schema for any of a plurality of XML

**Application No.:** 10/726,080

Office Action Dated: December 16, 2008

instances conforming to said schema document, each XML instance comprising having a set of XML data conforming to the schema specified by an XML schema namespace;;

computer readable instructions for typing a column of a relational database with said container so as to associate the column with the container and thereby require that any XML instance stored in the column conforms to the schema of [[one]] any of the at least two of the XML schema namespaces namespace URIs in the container, wherein said typing comprises includes validating that any XML instances existing in said column prior to said typing conform to at least one schema document identified by a namespace in said container;

computer readable instructions for validating prior to storing an XML instance in said column that the XML instance conforms to the schema of one of said XML schema namespaces in the container; and

computer readable instructions for storing said XML instance is in said database column upon so ensuring.

## 26. (Canceled)

- 27. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions for modifying said container so that said container refers to schema components in other XML schema namespaces.
- 28. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that assemble namespaces for a plurality of schema location attributes.
- 29. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that adds schema components to XML schema namespaces within at least one of said one or more containers for XML schema namespaces.

**Application No.:** 10/726,080

Office Action Dated: December 16, 2008

30. (Previously Presented) The computer readable storage medium of claim 25, further comprising computer readable instructions that locate a schema that is referred to by an XML schema namespace in the container for XML schema namespaces.

31 – 36. (Canceled)